Presentation for Tribal NPS 2007

by Ed Crall

Abstract

Cobb Creek / Fort Cobb Reservoir Watershed Implementation Project- Education Program

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Fort Cobb Reservoir and several streams in its watershed are impaired by sediment and nutrients. Pesticides and unknown toxicity are additional causes of impairment in the watershed. The watershed is largely agricultural, with row crop agriculture and rangeland as the primary landuses. The watershed has been well researched to document the nature and extent of water quality problems. Numerous agencies conducted research in the watershed. A considerable amount of data has been collected to detail the water quality problems.

As a result of these background studies, it was apparent that efforts were needed to reduce nonpoint source pollution in the watershed. The purpose of this project is to initiate the first step of a long-term watershed scale effort to reduce NPS loading to eliminate threats and impairments to Cobb Creek and Fort Cobb Reservoir. In accomplishing this goal, loadings as established in the TMDL and Water Quality Standards will be met. The education, implementation, and monitoring actives outlined in this work plan are only the first step in what should be a long term effort to achieve the objective.

This project is intended to affect long term behavioral changes of watershed residents and users that will assure continued protection of water quality in the Cobb Creek/ Fort Cobb Reservoir Watershed. Substantial effort in this project is devoted to determining and demonstrating practices essential for this goal. A complementary education program must ensure widespread adoption of these practices over the entire Cobb Creek/ Fort Cobb Reservoir watershed. The education program must also be established in a fashion such that it will continue past the life of the project. This talk will focus on the Fort Cobb Watershed Education Program, detailing its locally-led coordination, goals, and activities.

About the Watershed

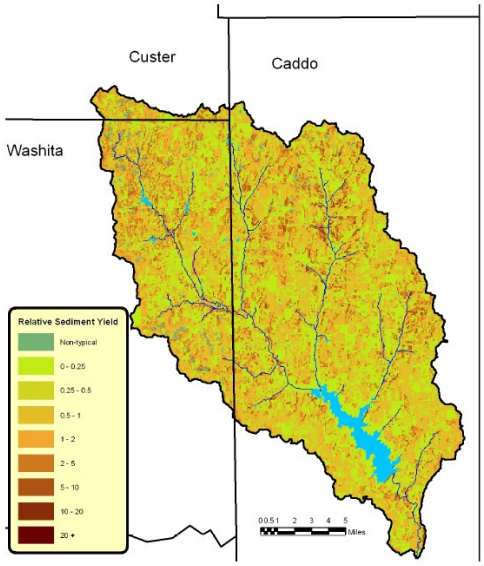
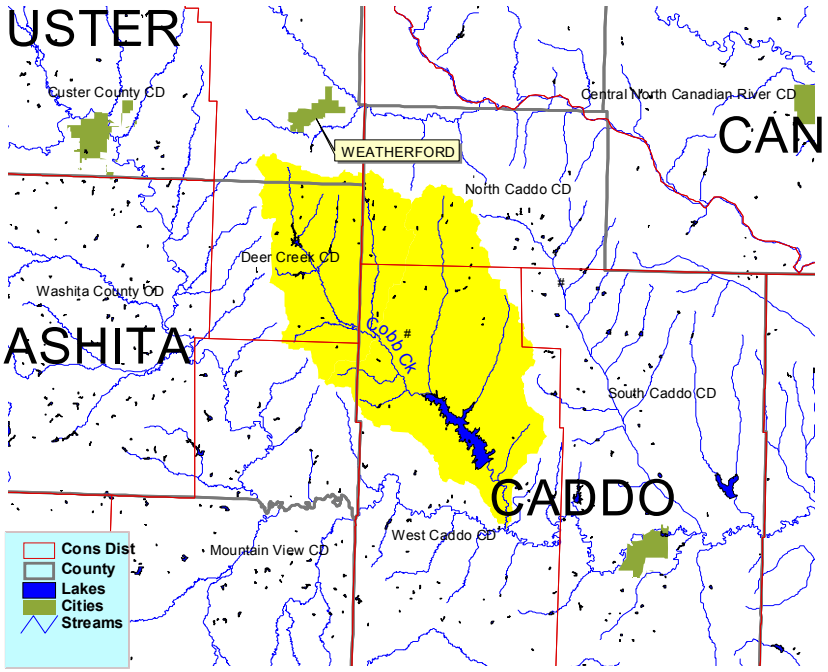


Figure 17 High resolution relative erosion in the Fort Cobb Basin. Based on SWAT model simulations.

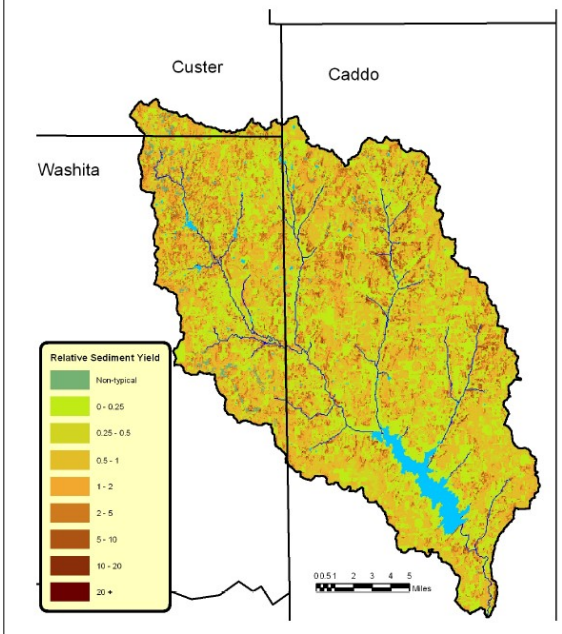
Tribes in the Watershed

- Apache
- Caddo
- Delaware
- Kiowa
- Washita
- And
  - Arapaho
  - Cheyenne
  - Cherokee


USTER
Custer County CD
Central North Canadian River CD
CAN
WEATHERFORD
North Caddo CD
Deer Creek CD
Washita County CD
ASHITA
Cobb Ck
South Caddo CD
CADDO
West Caddo CD
Mountain View CD
Cons Dist
County
Lakes
Cities
Streams

The Lake

NPS Pollution in the Watershed



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Implementation

- Riparian
  - Restoration
  - Management
- Structures
- Cropland conversion to pasture land
- No-till farming

Target Audience

- Farmers
  - Extensive nature of agriculture in the watershed
  - Potential impact of widespread adoption of no-till farming
  - The impact Farmers have on riparian areas

NPS Prevention Education Efforts

EdWAG Function

- Identify specific educational goals.
- Identify appropriate agents to implement the plan
- Draft addendum to watershed workplan that includes
  - Educational goals
  - Measures of success
- EdWAG included Hammond Motah formerly environmental director for the Apache Tribe

Education Priorities:

- Functional Riparian areas
- No-till farming
- Nutrient management
- Grass Planting
- Grazing Management
- Buffer Strips
- Riparian area maintenance

Water Quality Monitoring

Conclusion

Should we not strive to be a part of the beauty and wild around us?

Then why are we still so determined to conquer and tame the natural around us?